

IN THE CLAIMS:

Claims 1-34 (cancelled)

Claim 35 (currently amended) A process for the recovery of lactic acid from an aqueous solution containing lactic acid and a lactate salt, said process comprising:

(a) contacting said aqueous solution with a water-immiscible basic amine extractant to form an amine extract containing lactic acid and an aqueous raffinate solution containing a lactate salt;

(b) separating said amine extract from said aqueous raffinate;

(c) stripping lactic acid from said amine extract to form a solution of lactic acid and a stripped extractant;

(d) extracting said aqueous raffinate solution separated in step (b) with said stripped extractant formed in step (c) to extract lactic acid from said aqueous raffinate solution, form forming a lactic acid-containing stripped extractant; and

(e) after extracting lactic acid from said aqueous raffinate solution in step (d), forming a lactic acid-containing stripped extractant, using said lactic acid-containing stripped extractant formed in step (d) as said water-immiscible basic amine extractant in step (a).

Claim 36 (previously presented) The process of claim 35, wherein said aqueous solution has a pH of less than 5.

Claim 37 (previously presented) The process of claim 35, wherein most of said lactic acid in said aqueous solution is extracted by said basic amine extractant in step (a).

Claim 38 (previously presented) The process of claim 37, wherein at least 70% of said lactic acid in said aqueous solution is extracted by said basic amine extractant in step (a).

Claim 39 (previously presented) The process of claim 35, wherein said aqueous solution comprises a fermentation broth.

Claim 40 (currently amended) The process of claim 35, wherein said lactic acid-containing stripped extractant ~~of step (e)~~ comprises at least 3% lactic acid.

Claim 41 (currently amended) The process of claim 40, wherein said lactic acid-containing stripped extractant ~~of step (e)~~ comprises at least 5% lactic acid.

Claim 42 (previously presented) The process of claim 35, wherein said aqueous solution comprises said lactic acid and said lactate salt at a total concentration of at least 5%.

Claim 43 (previously presented) The process of claim 35, wherein the ratio between said lactic acid and said lactate salt in said aqueous solution is between 1:9 and 5:1.

Claim 44 (previously presented) The process of claim 43, wherein the ratio between said lactic

acid and said lactate salt in said aqueous solution is between 1:9 and 3:1.

Claim 45 (previously presented) The process of claim 35, wherein the ratio between said lactic acid and said lactate salt in said aqueous solution is up to 2:1.

Claim 46 (currently amended) The process of claim 35, wherein said aqueous solution is concentrated ~~by water evaporation~~ prior to step (a).

Claim 47 (previously presented) The process according to claim 35, wherein said lactate salt is selected from the group consisting of calcium lactate, sodium lactate, and ammonium lactate.

Claim 48 (previously presented) The process according to claim 35, wherein said basic extractant in step (a) has a basicity corresponding to pKa lower than 7.

Claim 49 (cancelled)

Claim 50 (previously presented) The process according to claim 35, wherein said extraction of step (a) is effected under CO₂ pressure.

Claim 51 (previously presented) The process of claim 35, wherein step (d) includes the use of an acid stronger than lactic acid so as to displace lactic acid from the lactate salt.

Claim 52. (previously presented) The process of claim 51, wherein said stronger acid is sulfuric acid, and a sulfate salt is formed as a by-product.

Claim 53 (previously presented) The process of claim 35, wherein said stripped extractant obtained in step (c) is adjusted by adding or removing a polar solvent before the use of said stripped extractant in step (d).

Claim 54 (new) The process of claim 35, wherein said lactic acid-containing stripped extractant obtained in step (d) is adjusted by adding or removing a polar solvent before the use of said lactic acid-containing stripped extractant in step (e).

Claim 55 (new) The process of claim 46, wherein said aqueous solution is concentrated by water evaporation prior to step (a).